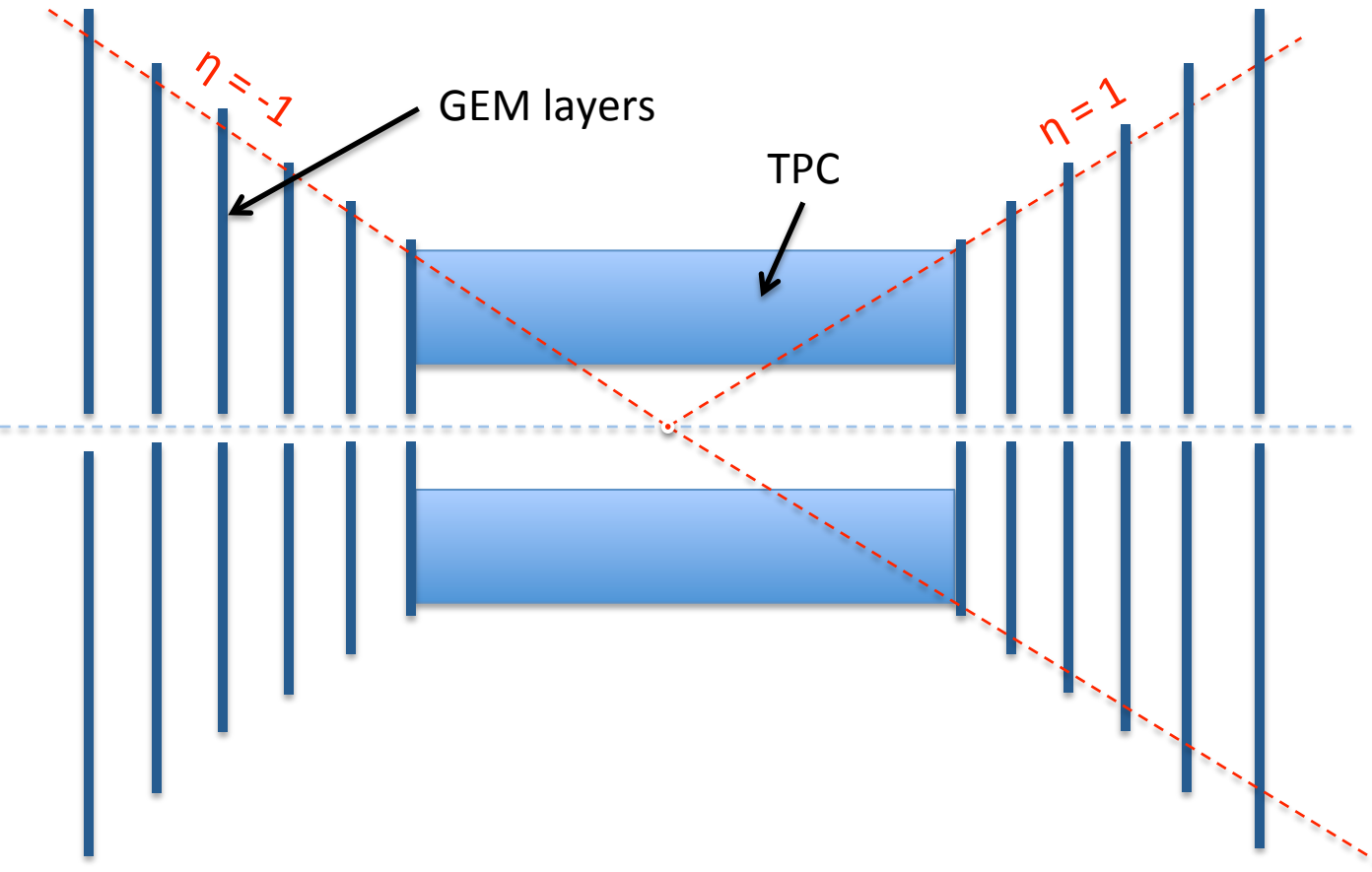


Trial geometry 1

6/25/12



TPC radial tracking volume:

$$r_1 = 20\text{cm}, r_2 = 40\text{cm}$$

$$z_1 = -50\text{cm}, z_2 = 50\text{cm}$$

$$n_{\text{max}} = 40$$

$$\sigma_{r\phi} = 80\mu\text{m}$$

$$\text{Acceptance: } -1 < \eta < 1$$

GEM planar tracking volume:

$$r_1 = 2\text{cm}$$

$$z_1 = \pm 50\text{cm}, z_2 = \pm 100\text{cm}$$

$$n_{\text{layers}} = 6$$

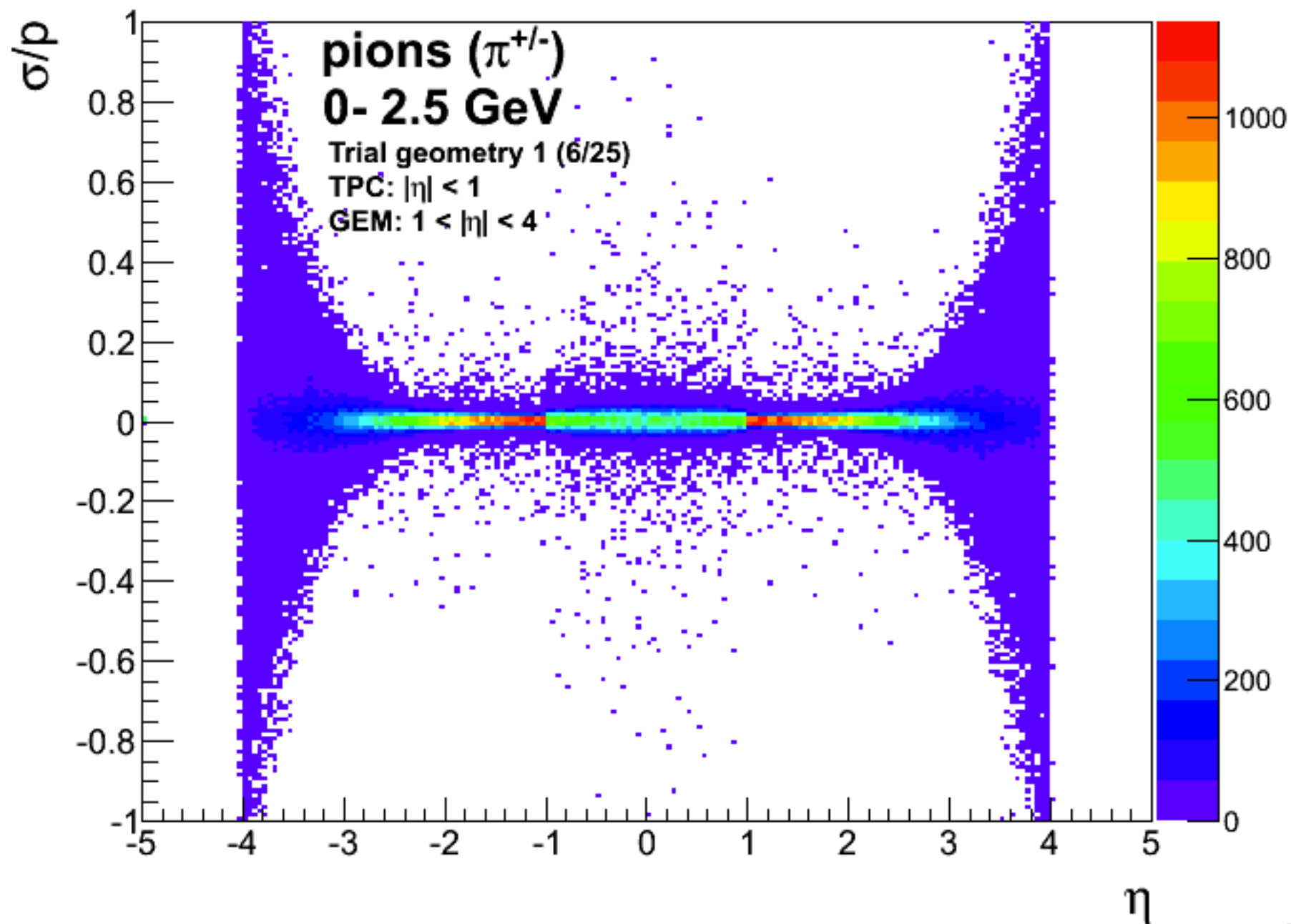
$$\sigma_{r\phi} = 80\mu\text{m}$$

$$\text{Acceptance: } 1 < |\eta| < 4$$

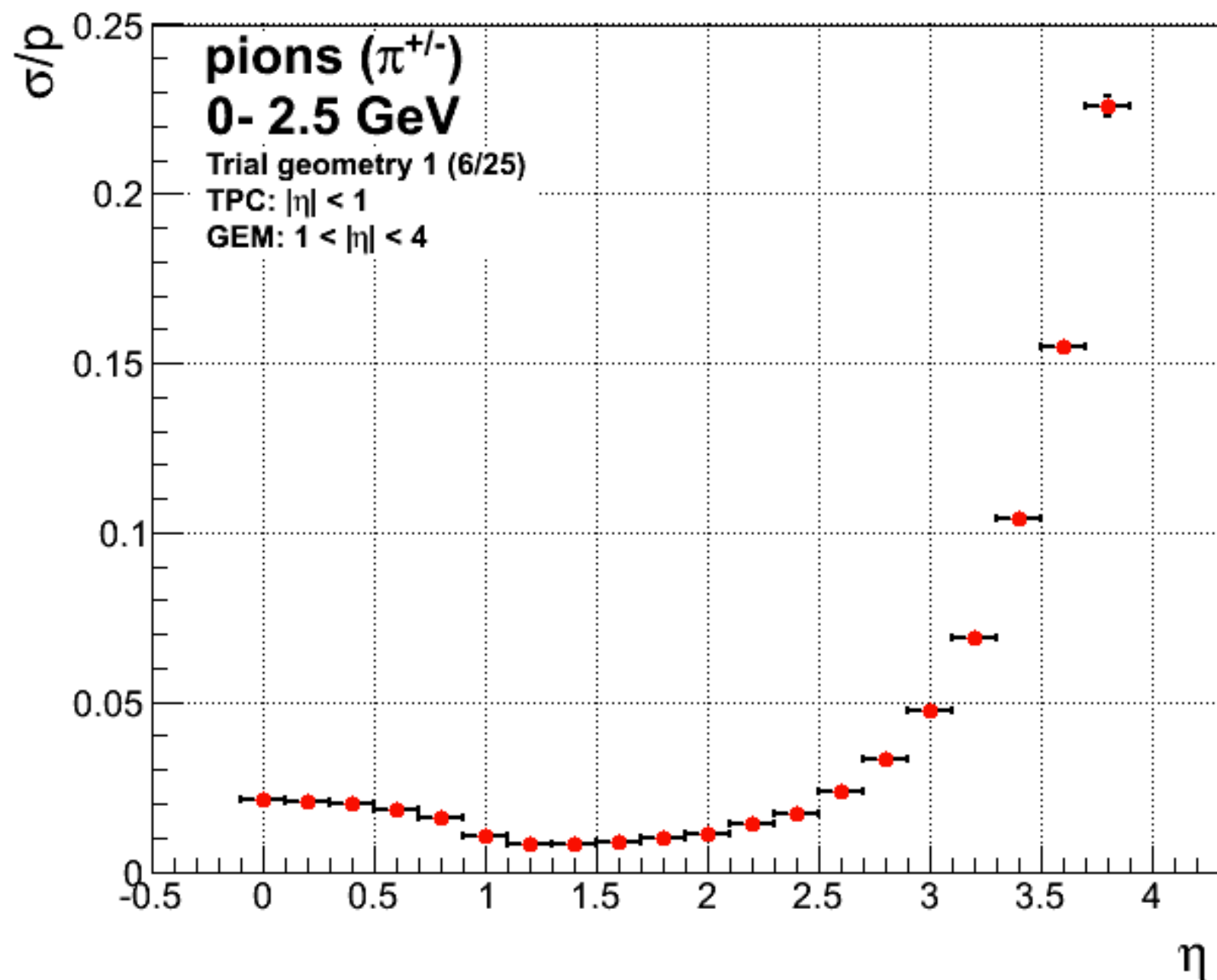
$$B = 2\text{T}$$

$$\text{Radiation lengths} = 0.03$$

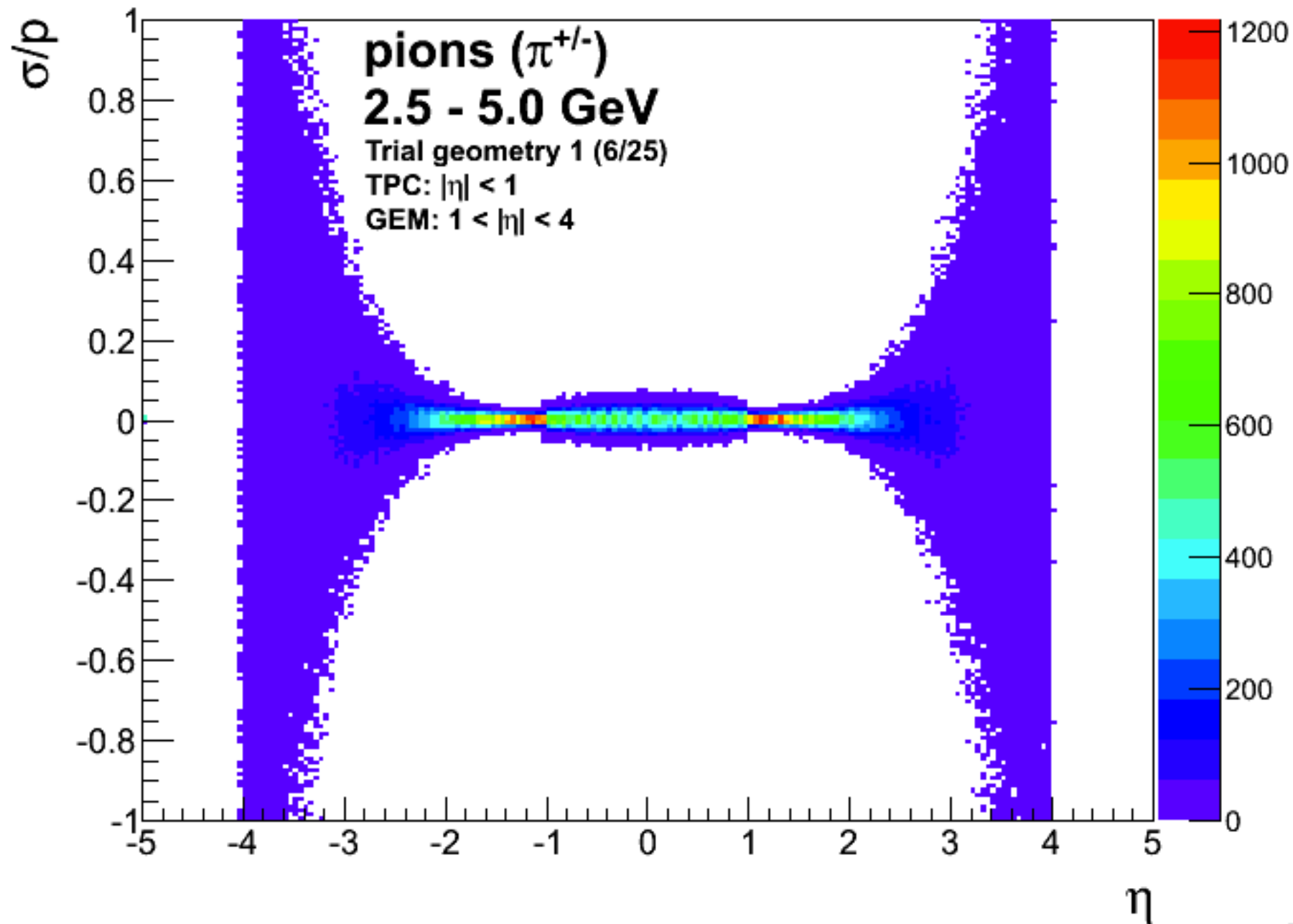
Pseudorapidity vs. σ/p



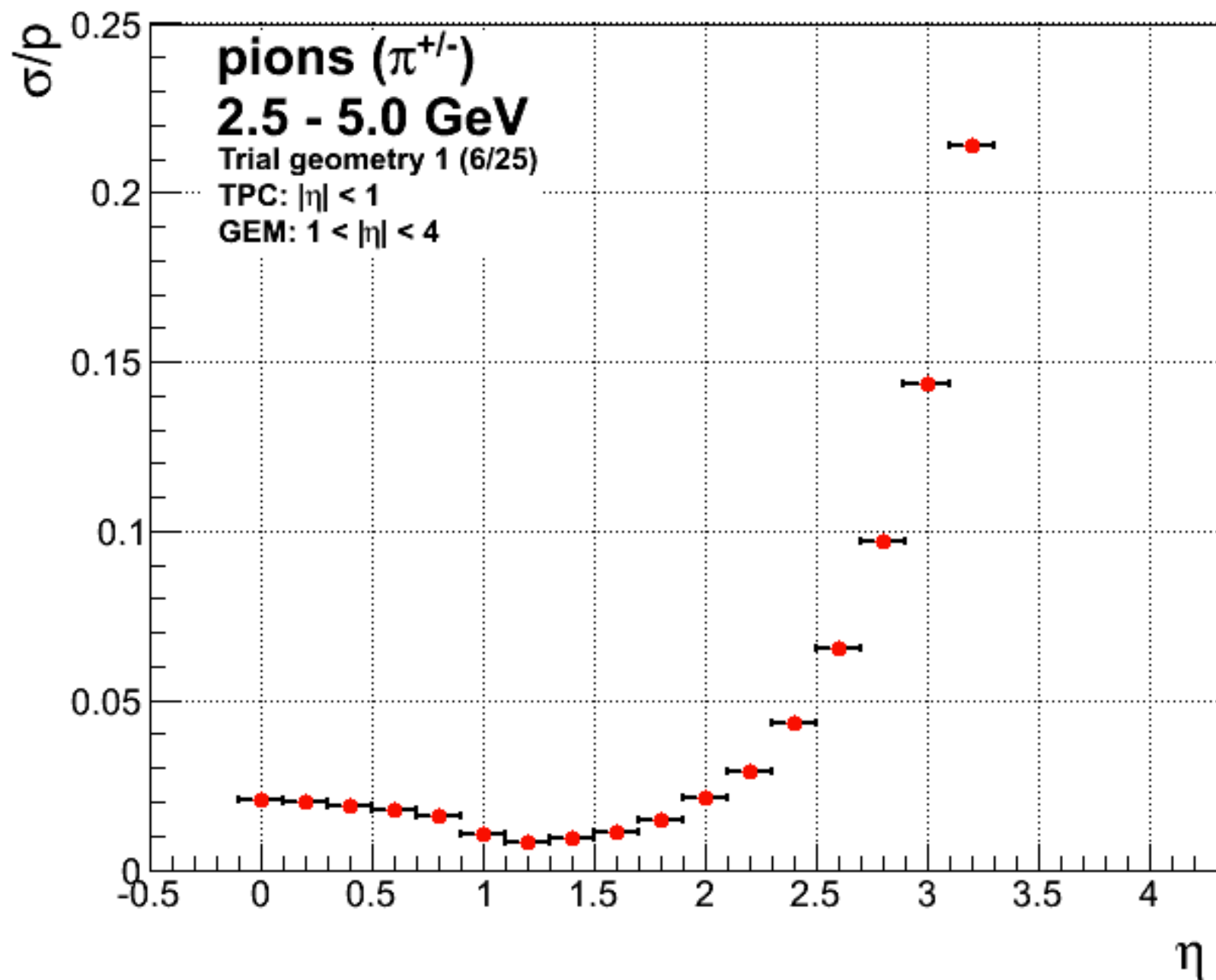
Momentum resolution of fast tracker



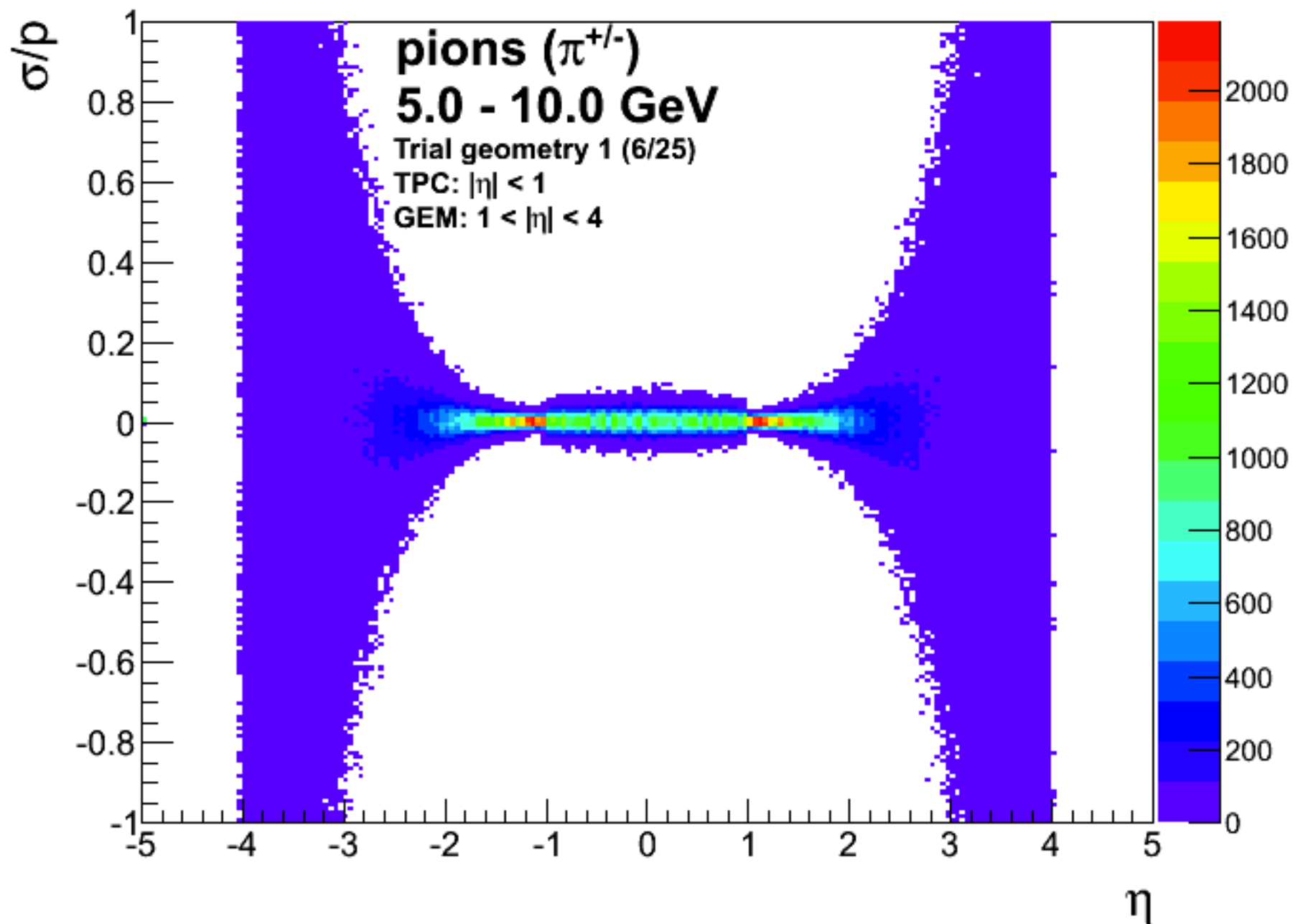
Pseudorapidity vs. σ/p



Momentum resolution of fast tracker



Pseudorapidity vs. σ/p



Momentum resolution of fast tracker

